1772/AF

60,158-107

UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Pontbriand
Serial No.:	09/493,530
Filed:	January 28, 2000
Group Art Unit:	1772
Examiner:	S. Nolan
Title:	PLASTIC POWDER FILLED EPOXY PAINT FOR TUBING

Box AF
Assistant Commissioner of Patents
Washington, D.C. 20231

APPEAL BRIEF

Dear Sir:

Subsequent to the filing of the Notice of Appeal on August 21, 2001, Appellant hereby submits its brief. Enclosed is a check for $320.00 for the appeal brief fee. Any additional fees or credits may be charged or applied to Deposit Account No. 50-1482 in the name of Carlson, Gaskey & Olds, P.C.

REAL PARTY IN INTEREST

Although no assignment has yet been recorded, the inventors are under a duty to assign this invention to Cooper Tire and Rubber Company. An assignment will be filed prior to issuance.

RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences.

STATUS OF CLAIMS

Claims 1, 2, 4-8 and 10-12 stand finally rejected under 103(a).

STATUS OF AMENDMENTS

All amendments have been entered.

SUMMARY OF THE INVENTION

As shown in Figure 2, this invention relates to a method of coating metal tubing 32 including the steps of applying a substrate 34 to the metal tubing 32, applying an epoxy coating 36 containing epoxy paint and plastic particles 38 onto an outer surface of the metal tubing 32, and curing the coating 36 on the metal tubing 32. This method is set forth in Claim 1. Claim 2 is dependent on Claim 1 and adds that the coating 36 is applied to the tubing 32 in a paint bath 24, as shown in Figure 1.

Returning to Figure 2, a tube 30 is described in independent Claim 8. The tube 30 includes an underlying metal tubing 32, an outer epoxy coating 36 containing plastic particles 38 mixed into an epoxy paint, and an intermediate substrate layer 34 placed between the metal tubing 32 and the coating 36.

ISSUES

A. Are Claims 1, 4-8 and 10-12 properly rejected under 35 U.S.C. 103(a) based on Anderson et al. in view of the Crea Nova Bulletin?

B. Is Claim 2 properly rejected under 35 U.S.C. 103(a) based on Anderson et al. in view of the Crea Nova Bulletin and Sakakibara et al.?

GROUPINGS OF CLAIMS

A. The rejection of Claims 1, 4-8 and 10-12 is contested.

B. The rejection of Claim 2 is contested.

PATENTABILITY ARGUMENTS

A. The rejection of Claims 1, 4-8 and 10-12 under 35 U.S.C. 103(a) is improper.

The Examiner finally rejected Claims 1, 4-8 and 10-12 based on Anderson et al. (U.S. Patent No. 5,082,698) in view of the Crea Nova Bulletin. The Examiner reached this conclusion by referencing the abstract and Column 3, line 33, Column 14, lines 47-55, and Column 7, lines 26-27 of Anderson. The Examiner finds an aqueous epoxy resin composition applied directly on a metal substrate as a pretreatment coating to protect the metal substrate from corrosion. The pretreatment coating can be coated with a primer coating following by the application of a topcoat. The Crea Nova Bulletin discloses the use of polyamide-12 powder in a lacquer to prevent abrasion. The Examiner argues that it would be obvious to combine the polyamide powder of the Crea Nova Bulletin with aqueous epoxy resin composition of Anderson.

The present invention is patentable and strikingly different from the combination of Anderson and the Crea Nova Bulletin. As described by Claim 8, the present invention provides a tube including:

> ...an underlying metal tubing; and an outer epoxy coating, said outer epoxy coating plastic particles mixed into an epoxy paint, wherein an intermediate substrate layer is placed between said metal tubing and said coating.

[See Claim 8]. Claims 8 and 10-12 of the present invention all share this same or similar features, and Claims 1, 2, 4-7 provide a method for coating the tube. [See Claims 1, 2, 4-8, 10-12].

The combination of Anderson and the Crea Nova Bulletin does not suggest Appellant's claimed invention. Appellant is claiming a method of coating a tubing including applying a substrate to the tubing prior to applying an epoxy coating containing the epoxy paint and the plastic particles. Applicant is also claiming a tube including a metal tubing, an outer epoxy coating, and an intermediate substrate layer. In Anderson, the aqueous epoxy resin-containing composition is applied directly to the metal substrate and is used as a pretreatment coating. The pretreatment coating may then coated with a primer coating and a topcoat. In Appellant's claimed invention, a

substrate is applied between the metal tubing and the epoxy coating, and the epoxy coating is not directly applied to the tubing. The combination of the polyamide particles of the Crea Nova Bulletin with Anderson would not suggest Appellant's claimed invention.

Additionally, there is no benefit of using the plastic particles disclosed in the Crea Nova Bulletin with the aqueous epoxy resin composition of Anderson. In Anderson, the aqueous epoxy resin composition is used to improve corrosion resistance by improving adhesion between the epoxy paint and the metal coil. The plastic particles disclosed in the Crea Nova Bulletin reduce gloss and dirt pickup and improve abrasion resistance and structure. Combining the plastic particles of the Crea Nova Bulletin with the epoxy composition of Anderson would provide no benefit to the epoxy composition. The pretreatment coating of Anderson improves adhesion. There is no need to resist abrasion and decrease dirt pickup in a pretreatment coating. These features would be more beneficial for a top coat, not for a pretreatment coating.

Finally, the plastic particles of the Crea Nova Bulletin are disclosed as being used in a lacquer. There is no motivation to utilize the plastic particles of the Crea Nova Bulletin which are disclosed as used in lacquer with the aqueous epoxy resin composition disclosed in Anderson. The combination of Anderson and the Crea Nova Bulletin do not suggest Appellant's invention. Accordingly, the Examiner's rejection is improper.

B. The rejection of Claim 2 under 35 U.S.C. 103(a) is improper.

The Examiner finally rejected Claim 2 based on Anderson et al. in view of the Crea Nova Bulletin and Sakakibara et al (U.S. Patent No. 4,268,542). The Examiner reached this conclusion by referencing Sakakibara, including column 7, lines 20, 26 and 64-65. The Examiner finds a powder paint which is coated on articles by several methods, including dip coating. The Examiner argues that it would be obvious to combine the polyamide powder of the Crea Nova Bulletin and the dip coating method of Sakakibara with the epoxy resin composition of Anderson.

The present invention is patentable and strikingly different from Anderson in view of the Crea Nova Bulletin and Sakakibara. As described by Claim 2, the present invention provides a method of coating metal tubing "wherein said coating is applied to said tubing in a paint bath. [See Claim 2].

As stated above, the combination of Anderson and the Crea Nova Bulletin and Sakakibara does not suggest Appellant's claims. Appellant is claiming a method of coating a tubing including applying a substrate to the tubing prior to applying an epoxy coating in a paint bath. In Anderson, the pretreatment coating is applied directly to the metal substrate and is used as a pretreatment coating. Even if the pretreatment coating of Anderson was applied in a paint bath, the pretreatment coating would be applied directly to the substrate, and not on an intermediate substrate as required by Claim 2. Combining the polyamide particles of the Crea Nova Bulletin and Sakakibara with Anderson would not suggest Appellant's claims.

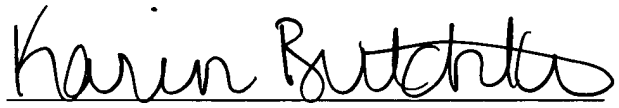
Therefore, a rejection based on obviousness is improper for Claim 2.

CLOSING

For the reasons set forth above, the rejection of all claims is improper and should be reversed. Appellant respectfully requests such an action.

Respectfully submitted,

CARLSON, GASKEY & OLDS, P.C.



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Dated: October 22, 2001

CERTIFICATE OF MAILING

I hereby certify that three copies of this Appeal Brief and accompanying documents are being deposited with the United States Postal Service as first class mail, postage prepaid, in an envelope addressed to Box AF, Assistant Commissioner of Patents, Washington, D.C. 20231, on October 22, 2001.

Rafmi Blackerby

CLAIM APPENDIX

What is claimed is:

1. A method of coating metal tubing comprising the steps of:
   (1) applying an epoxy coating containing epoxy paint and plastic particles onto an outer surface of a metal tubing;
   (2) curing said coating on said metal tubing; and
   (3) applying a substrate to said metal tubing prior to being covered by said epoxy coating.

2. A method as set forth in Claim 1, wherein said coating is applied to said tubing in a paint bath.

4. A method as recited in Claim 1, wherein said plastic particles are nylon.

5. A method as set forth in Claim 1, wherein said plastic particles have an average size of less than 50 micron.

6. A method as recited in Claim 5, wherein said plastic particles have an average size of less than 25 micron.

7. A method as set forth in Claim 1, wherein said coating includes about 20% by weight of said plastic particles.

8. A tube comprising:
   an underlying metal tubing; and
   an outer epoxy coating, said outer epoxy coating plastic particles mixed into an epoxy paint, wherein an intermediate substrate layer is placed between said metal tubing and said coating.

10. A tube as set forth in Claim 8, wherein said plastic particles have an average particle size of less than 50 micron.

11. A tube as set forth in Claim 8, wherein said plastic particles have an average size of less than 25 micron.

12. A tube as set forth in Claim 8, wherein said plastic particles are formed of a nylon.